

Attorney Docket No.: J3679(C)  
Serial No.: 10/520,891  
Filed: June 5, 2006  
Confirmation No.: 4944

REMARKS

Reconsideration of the application, as amended, is respectfully requested.

Claim 1 has been amended to further identify the hair treatment composition as a shampoo that further comprises anionic surfactant in an amount of from 5 to 30 percent by weight of the hair treatment composition. See for example, the specification at page 6, lines 24 to 26, page 8, line 20. Additionally, the claim has been amended to specify that the composition is applied to clean the hair, and to repair or restore damaged hair exhibiting cuticle or protein loss, excessive fiber stiffness, fiber brittleness and breakage, or frayed or split ends or to prevent such damage to the hair. See, for example, page 1, lines 14 to 25. Applicants note that page 1, lines 22 to 25 the subject application states:

Damage to the hair **typically** manifests itself in cuticle and protein loss from the hair fibre, excessive fiber stiffness, hair fibre brittleness and breakage and frayed or split ends. (Emphasis added.)

A few paragraphs later, at page 2, lines 8 to 11, the application states:

The present invention has now found that compositions comprising certain specific hydroxyl compounds are effective for repairing and **preventing the principal symptoms of damaged hair**. (Emphasis added.)

Given the disclosure of how hair damage typically or commonly manifests itself, it is clear that the reference to repairing or preventing the principal or main symptoms of hair damage refers to the damage described in the earlier paragraph at page 1, lines 22 to 25. It is respectfully submitted that the subject amendment moots the 35 U.S.C. 112 rejection applied to the subject claims.

Claim 2 has been amended to add a period.

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Claim 3 has been cancelled without prejudice.

New claim 13, depending from claim 1, specifies that the anionic cleansing surfactant is present in an amount of from 8 to 16 wt% of the hair treatment composition. See, for example, page 8, lines 18 to 20.

New claim 14, depending from claim 1, specifies that the hair treatment composition further comprises cationic conditioning polymer. See, for example, page 12, lines 4 to 6.

New claim 15, depending from claim 1, specifies that the hair treatment composition further comprises silicone conditioning agent. See, for example, page 13, lines 2 to 5.

New claim 16, depending from claim 1, specifies that the hair treatment composition further comprises a suspending agent. See, for example, page 21, line 21 to page 22, line 1.

New claim 17 is a method claim similar to claim 1, except that the hair treatment composition is identified as a leave-on post wash conditioner comprising a selected hydroxyl compound, a cationic conditioner, and a fatty alcohol material comprising from 8 to 22 carbon atoms, the fatty alcohol material comprising from 8 to 22 carbon atoms and being present in an amount of 0.01 to 10 wt.% of the composition, with the hair treatment composition being applied to condition hair and to repair or restore damaged hair exhibiting cuticle or protein loss, fiber brittleness and breakage, or frayed or split ends, or is applied to prevent such damage to the

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hair. See, for example, page 1, lines 14 to 25; page 6, lines 24 to 29; page 15, lines 1 to 15; page 19, lines 16 to 19; and page 20, line 5 to page 21, line 14.

New claim 18, depending on claim 17, specifies that the fatty alcohol material comprises a fatty alcohol, an alkoxylated fatty alcohol or a mixture thereof. See, for example, page 20, lines 14 to 15.

New claim 19, depending on claim 17, specifies that the hair treatment composition further comprises a silicone conditioning agent. See, for example, page 13, lines 2 to 5.

Entry of the above described amendments is respectfully requested.

Claims 1-4 stand rejected as anticipated by Yamamoto et al.(JP 407330661). This rejection is respectfully traversed.

Yamamoto et al. is directed to a composition that includes a keratin reducing agent, such as, for example thioglycolic acid, ammonium thioglycolate, triethanolamine thioglycolate, diethanolamine thioglycolate, monoethanolamine thioglycolate, thioglycolate salt; L-cysteine, sodium thioglycolate, certain cysteine compounds, and certain sulfites. Keratin reducing agents of this type are commonly incorporated as waving agents into hair treatment compositions known as permanent waves or "perms", which is the application to which Yamamoto et al. is directed. The compositions of Yamamoto et al also contain a quaternary ammonium salt (as a conditioning agent to improve hair "pliability") and an organic solvent (which may be a pentanol or hexanol) which Yamamoto et al. teaches improves the permeability of the quaternary ammonium salt into the hair fiber.

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In permanent waving, cysteine sulfur-sulfur crosslinks in the hair are broken and reformed to provide a desired wave or set. See, for example, Hair and Hair Care, Cosmetic Science and Technology Series Volume 17, Chapter 6, at pp. 167-186, a copy of which accompanies the Supplemental Information Disclosure Statement filed together with this Amendment. Additionally, the chemical changes to the hair caused by treatment with a reducing agent typically results in a swelling of the hair fiber. It is further noted that following the application of permanent wave compositions containing a thioglycolate-type waving agent, the hair is commonly treated with an oxidizing agent-containing "neutralizer" or reoxidizer. When the waving agent is a bisulfite, permanent set may be accomplished without reoxidation, through rinsing. In permanent wave applications, (a) the reducing agent is not a leave-on formulation and (b) some type of post-reducing agent treatment is required to re-form the sulfur-sulfur crosslinks in the hair fiber.

The treatment disclosed by Yamamoto et al. brings about both physical and chemical changes to the hair fibers that are not normally encountered in shampooing or post-wash conditioning, with the organic solvent acting to penetrate into the hair fiber, which has been so modified, to deliver quaternary conditioning agent within the hair fiber. There is nothing in Yamamoto et al. that discloses or suggests the use of the organic solvent to provide a hair conditioning benefit to "unmodified" hair.

Pursuant to the subject invention it was found that the inclusion of a selected hydroxyl compound into a shampoo or leave-on conditioner composition enhances the ability of the composition to repair, restore or prevent damage in the form of cuticle or protein loss, excessive fiber stiffness, fiber brittleness and breakage, or frayed or split ends.

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Claims 1, 2, 4 and 13 to 16 of the subject application are directed to a method of treating hair that employs a shampoo composition that contains a selected hydroxyl compound and an anionic cleansing surfactant. The shampoo compositions so claimed are not the permanent wave compositions of Yamamoto et al. Claims 17 to 19 of the subject application are directed to a method of treating or preventing hair damage that employs a leave-on conditioner composition; in contrast thereto, Yamamoto et al. is directed to a permanent wave process in which its reducing agent/conditioning agent/organic solvent-containing composition is not a leave-on composition. It is respectfully submitted that the cleaning or post-wash conditioning processes disclosed by the amended claims patentably distinguish over the hair reducing treatments disclosed by Yamamoto et al. et al.

In view of the foregoing amendments and remarks, reconsideration and allowance of the subject claims are respectfully requested.

If a telephone conversation would be of assistance in advancing the prosecution of the present application, applicants' undersigned attorney invites the Examiner to telephone at the number provided.

Respectfully submitted,



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